- UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



REGION VIII

999 18th STREET - SUITE 500 DENVER, COLORADO 80202-2466

JUL 24 1998

Ref: 8P-W-GW

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Ms. Kathy Turner
Petroleum Engineering Technician
Petroglyph Operating Company, Inc.
P. O. Box 1839
Hutchinson, Kansas 67504-1839

RE: UIC PERMIT MODIFICATION

Conversion of Additional Well to

Antelope Creek Waterflood EPA Area Permit UT2736-00000

Duchesne County, Utah

Dear Ms. Turner:

Your letter of June 22, 1998, requesting that the following production well be converted to a Class II enhanced oil recovery well and added to the Antelope Creek Waterflood, as authorized under EPA Area Permit #UT2736-00000 is hereby granted.

NAME

LOCATION

EPA WELL PERMIT NO.

Ute Tribal #18-05

SW/NW Section 18 #UT2736-04472 T 5 S - R 3 W Duchesne County, UT

This additional well is within the boundary of the existing area permit for the Antelope Creek Waterflood (UT2736-00000), and this addition is made by permit modification according to the terms and conditions of that permit. Unless specifically mentioned in this Permit Modification, conversion is being made under the provisions of 40 CFR 144.33 and the terms and conditions of the original permit. The proposed well location, well schematic, conversion procedures, plugging and abandonment plan and schematic, submitted by your office, have been reviewed and approved as follows:

- (1) The **conversion** of this production well has been reviewed, and found satisfactory, therefore, no corrective action is required.
- (2) Maximum injection pressure (Pmax) the permittee shall limit the maximum surface injection pressure (Pmax) to 2243 psig until fracture treatments are performed on eight (8) individually different zones and establish an average fracture gradient (Fg) derived from

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instantaneous shut-in pressures (ISIP) from each zone within this newly converted well.

The calculations for the fracture gradient was estimated from instantaneous shut-in pressures (ISIP's) observed during fracturing treatments performed on six (6) individually fraced zones within the Ute Tribal #18-12 well, one fourth (1/4) mile south of Ute Tribal #18-05 well.

Permit provision have been made that allow the operator to request an increase or decrease in the injection pressure.

(3) The plugging and abandonment plan and schematic, submitted by your office, has been reviewed, and approved.

Prior to commencing injection into this well, permittee must fulfill permit condition Part II, C. 2. and have received separate written authorization to inject by the Environmental Protection Agency. In summary, these requirements for your newly permitted injection well are:

- (1) All conversion is complete and the permittee has submitted a completed Well Rework Record (EPA Form 7520-12).
- (2) The pore pressure has been determined.
- (3) The well has successfully completed and passed a mechanical integrity test (MIT); EPA form enclosed.

All other provisions and conditions of the permit remain as originally issued July 12, 1994.

If you have any questions, please contact Mr. Chuck Williams at (303) 312-6625. Also, please direct the above requirements to Mr. Williams at the above letterhead address, citing MAIL CODE 8P-W-GW. Thank you for your continued cooperation.

Sincerely,

Kerrigán G. Clough

Assistant Regional Administrator

Office of Partnerships and Regulatory Assistance

Enclosure: EPA Form

cc: Mr. Ronald Wopsock, Chairman

Ute Indian Tribe

Ms. Elaine Willie, Environmental Director

Ute Indian Tribe

Norman Cambridge

BIA - Uintah & Ouray Agency

Mr. Jerry Kenczka

BLM - Vernal District Office

Mr. Gilbert Hunt

State of Utah Natural Resources

Division of Oil, Gas & Mining

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